



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,468	06/11/2002	Toshiro Nishio	967 029	8804

7590 08/08/2006

Owen D Marjama
Wall Marjama & Bilinski
Suite 400
101 South Salina Street
Syracuse, NY 13202

EXAMINER

LEE, RICHARD J

ART UNIT	PAPER NUMBER
----------	--------------

2621

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,468

Applicant(s)

NISHIO ET AL.

Examiner

Richard Lee

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2621

1. The request filed on May 22, 2006 for a Request for Continued Examination (RCE) is acceptable and a RCE has been established. An action on the RCE follows.

2. Claims 38, 41, and 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 38, line 9, "the signal" shows multiple antecedent basis (see lines 1, 3-4, 4, 4-5).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 33 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al (US 2002/0001346 A1) of record in view of Liu et al of record (5,987,554).

Kato et al discloses a moving picture coding and decoding apparatus as shown in Figures 1 and 5, and substantially the same transmission apparatus for transmitting a video signal through a transmission path as claimed in claims 33 and 36, comprising substantially the same decoder (i.e., as provided in Figure 5) to decode a compressively coded signal to output picture signals, including a base-band luminous signal and base-band color different signals (see section [0049]), and a control signal which is generated based on the compressively coded signal, wherein the control signal is information indicating at least one of (1) a picture of the picture signals is any of an I picture, a P picture, and a B picture, (2) a picture of the picture signals is either a picture picked up by progressive scanning or a picture picked up by interlaced scanning, (3) a picture of the picture signals is either a top field or a bottom field picture, (4) a compression

Art Unit: 2621

ratio of MPEG, and (5) field repeat information of a picture of the picture signals (see sections [0058], [0059], and [0096] to [0100]).

Kato et al does not particularly disclose, though, an I2C controller to control an I2C signal, and a CPU to control the I2C controller and the decoder, wherein the decoder is controlled by the CPU so as to output the picture signals which are displayable in a reception apparatus, on the basis of reception apparatus information that is received through the I2C controller as claimed in claim 33. However, Liu et al discloses a method of controlling the transfer of information across an interface between two buses as shown in Figure 1, and teaches the conventional use of an I2C controller (see column 3, lines 9-46) to control an I2C signal and a CPU for controlling various system devices, which includes an I2C controller and a video decoder so that the decoder may therefore output pictures signals to be displayed in a reception apparatus on the basis of reception apparatus information that is received through the I2C controller (see column 1, line 56 to column 2, line 14, column 3, lines 9-46). Therefore, it would have been obvious to one of ordinary skill in the art, having the Kato et al and Liu et al references in front of him/her and the general knowledge of CPU control of system devices, would have had no difficulty in providing the I2C controller and CPU for controlling the I2C controller and the video decoder as taught by Kato et al as part of the system of Liu so that the video decoder of Liu may be controlled by the CPU in order to output the picture signals which are displayable in a reception apparatus on the basis of reception apparatus information that is received through the I2C controller for the same well known flexibility and lowering of interconnecting costs by reducing board space and pin count by utilizing the I2C bus architecture and communication among various interfaces through the CPU purposes as claimed.

Art Unit: 2621

5. Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al and Liu et al as applied to claims 33 and 36 in the above paragraph (4), and further in view of Maruoka of record (5,257,106) and Tahara et al (6,560,282).

The combination of Kato et al and Liu et al discloses substantially the same transmission apparatus as above, but does not particularly disclose an encoder to time-divisionally multiplex the picture signals in a video period and the control signal in a retrace period, thereby to encode the picture signals and the control signal into transmission path signals suited to the transmission path as claimed in claims 34 and 35. However, Tahara et al discloses a transcoding system using encoding history information as shown in Figure 15, and teaches the conventional multiplexing of encoded picture signals (i.e., 103 of Figure 15 and see column 23, line 46 to column 24, line 28) in a transmission path after video decoder (i.e., 102, 104 of Figure 15). It is to be noted that Tahara fails to disclose the specifics of multiplexing the picture signals in a video period and the control signal in a retrace period, thereby to encode the picture signals and the control signal into transmission path signals suited to the transmission path as claimed. Maruoka however discloses a television signal receiver system as shown in Figure 1B, and teaches the conventional use of an encoder for time division multiplexing of audio signal and independent data (i.e., control data) during the retrace interval of the video signal, and the encoding of the picture signals and control signal into transmission path signals suited to the transmission path (i.e., the transmission of the multiplexed digital signal as a packet, see column 1, line 59 to column 2, line 13). Therefore, it would have been obvious to one of ordinary skill in the art, having the Kato et al, Liu et al, Maruoka, and Tahara et al references in front of him/her and the general knowledge of time division multiplexing systems, would have had no difficulty in providing an encoder for time

Art Unit: 2621

division multiplexing of control data during the retrace interval of the video signal, and the encoding of the picture signals and control signal into transmission path signals suited to the transmission path as taught by the combination of Maruoka and Tahara et al for the transmission system of Kato et al and Liu et al for the same well known time division multiplexing of video and associated data during the retrace period for transmission to a receiver purposes as claimed.

6. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al and Liu et al as applied to claims 33 and 36 in the above paragraph (4), and further in view of Tahara et al.

The combination of Kato et al and Liu et al discloses substantially the same transmission apparatus as above, but does not particularly disclose wherein the control signal is used for controlling image quality as claimed in claim 37. Such technical features are however old and well recognized in the art, as exemplified by Tahara et al (see column 20, lines 4-16). Therefore, it would have been obvious to one of ordinary skill in the art, having the Kato et al, Liu et al, and Tahara et al references in front of him/her and the general knowledge of image quality controls of video, would have had no difficulty in providing an image quality control signal as taught by Tahara et al within the system of Kato et al for the same well known control of video qualities purposes as claimed.

7. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al in view of Tahara et al and Maruoka.

Kato et al discloses a moving picture coding and decoding apparatus as shown in Figures 1 and 5, and substantially the same reception apparatus for receiving a video signal through a transmission path (see Figure 5) as claimed in claim 39, comprising substantially the same

Art Unit: 2621

decoder (i.e., as provided in Figure 5) to decode transmission path signal into picture signals, including a base-band luminous signal and base-band color different signals (see section [0049]), and a control signal (see sections [0058], [0100]), the transmission path is generated by coding the control signal (see sections [0058], [0100]), which is generated based on a compressively coded signal, and the video signal so as to be suited to the transmission path (see Figures 1 and 5).

Kato et al does not particularly disclose, though, coding the control signal to be used for controlling image quality, an image quality control to control the image qualities of the picture signals on the basis of the control signal, and the control signal being time division multiplexed in a retrace period as claimed in claim 39. However Tahara et al teaches the conventional use of a control signal for controlling the image qualities of the picture signals (see column 20, lines 4-16), and multiplexing of encoded picture signals (i.e., 103 of Figure 15 and see column 23, line 46 to column 24, line 28) in a transmission path after video decoder (i.e., 102, 104 of Figure 15). It is to be noted that Tahara fails to disclose the specifics of time division multiplexing the control signal in a retrace period as claimed. However, Maruoka discloses a television signal receiver system as shown in Figure 1B, and teaches the conventional use of an encoder for time division multiplexing of audio signal and independent data (i.e., control data) during the retrace interval of the video signal (see column 1, line 59 to column 2, line 13). Therefore, it would have been obvious to one of ordinary skill in the art, having the Kato et al, Tahara et al, and Maruoka references in front of him/her and the general knowledge of image quality controls of video and time division multiplexings, would have had no difficulty in providing an image quality control signal as taught by Tahara et al as well as the time division multiplexing of

Art Unit: 2621

control data in a retrace period as taught by Tahara et al and Maruoka within the system of Kato et al for the same well known control of video qualities and time division multiplexing of information during a retrace interval of a video period for transmission to a receiver purposes as claimed.

8. Claims 38, and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al, Tahara et al, and Maruoka as applied to claim 39 in the above paragraph (7), and further in view of Ishikawa et al of record (5,969,767) and Liu et al of record (5,987,554).

The combination of Kato et al, Tahara et al, and Maruoka discloses substantially the same reception apparatus as above, further including wherein the control signal is information indicating at least one of (1) a picture of the picture signals is any of an I picture, a P picture, and a B picture, (2) a picture of the picture signals is either a picture picked up by progressive scanning or a picture picked up by interlaced scanning, (3) a picture of the picture signals is either a top field or a bottom field picture, (4) a compression ratio of MPEG, and (5) field repeat information of a picture of the picture signals (see sections [0058], [0100] of Kato et al), and wherein the control signal is used for controlling image quality (see column 20, lines 4-16 of Tahara et al).

The combination of Kato et al, Tahara et al, and Maruoka does not particularly disclose the followings:

(a) a ROM table to hold reception apparatus information indicating performance for making the picture signal displayable as claimed in claims 38 and 40; and

(b) an I2C controller to output the reception apparatus information stored in the ROM table to a transmission apparatus on the basis of an I2C signal outputted from the transmission apparatus as claimed in claims 38 and 40.

Regarding (a), Ishikawa et al discloses a multipicture video signals display apparatus as shown in Figures 13-15, and teaches the conventional use of a ROM table (i.e., 3332 of Figure 15) for holding reception apparatus information indicating performance for making the picture signal displayable (see column 8, lines 50-67). Therefore, it would have been obvious to one of ordinary skill in the art, having the Kato et al, Tahara et al, Maruoka, and Ishikawa et al references in front of him/her and the general knowledge of the use of tables for displays, would have had no difficulty in providing the ROM table of Ishikawa et al for the system within the combination of Kato et al, Tahara et al, and Maruoka so as to hold reception apparatus information indicating performance for making the signal displayable for the same well known display of video based on stored information data purposes as claimed.

Regarding (b), Liu et al discloses a method of controlling the transfer of information across an interface between two buses as shown in Figure 1, and teaches the conventional use of an I2C controller (see column 3, lines 9-46) to control an I2C signal as well as the use of the I2C controller and a CPU for controlling various system devices, which includes video encoders and decoders (see column 1, line 56 to column 2, line 14, column 3, lines 9-46). It is hence considered obvious to use the I2C controller of Liu et al so as to output the reception apparatus information stored in the ROM table (i.e., as provided by Ishikawa et al, see 3332 of Figure 15 of Ishikawa et al) to a transmission apparatus on the basis of an I2C signal outputted from the transmission apparatus (see Figures 13-15 of Ishikawa et al). Therefore, it would have been

Art Unit: 2621

obvious to one of ordinary skill in the art, having the Kato et al, Tahara et al, Maruoka, Ishikawa et al, and Liu et al references in front of him/her and the general knowledge of CPU and I2C control of system devices, would have had no difficulty in providing an I2C controller to control an I2C signal as well as the use of the I2C controller and a CPU for controlling various system devices, which includes video encoders and decoders as taught by Ishikawa et al for the system within the combination of Kato et al, Tahara et al, and Maruoka, so that the I2C controller of Liu et al is provided so as to output the reception apparatus information stored in the ROM table of Ishikawa et al to a transmission apparatus on the basis of an I2C signal outputted from the transmission apparatus for the same well known control and transmission of video via CPU and I2C control interfacing purposes as claimed.

9. The applicants, at pages 6-7 of the amendment filed May 22, 2006, request for the Examiner to address the arguments from the amendment after Final rejection dated March 21, 2006 since the Examiner's Advisory action dated April 4, 2006 had failed to properly consider and address the substantive arguments. The Examiner still however believes that the response in the Advisory action dated April 4, 2006 was proper since the Examiner had reviewed all the arguments from the amendment dated March 21, 2006, and had indicated that all the limitations have been previously addressed in the Final action dated November 21, 2005 and therefore the applicants' arguments are deemed not to be persuasive. Upon further consideration, it is determined that the above new grounds of rejections are deemed proper. And as a result of the new grounds of rejections, applicants' arguments from the amendment dated March 21, 2006 are deemed moot. The Examiner will now address only pertinent arguments from the amendment filed May 22, 2006.

The applicants' summary of the present invention as shown at pages 6-7 of the amendment filed March 21, 2006 is greatly appreciated.

The applicants request at pages 11-12 of the amendment filed May 22, 2006 for the Examiner to point out specifically where in the Kato and/or Maruoka references teach or suggest the "control signal which is generated based on the compressively coded signal" as claimed. The applicants' attention are directed to sections [0098] to [0100] of Kato et al for the specific teachings of control information generated by circuit 201 of Figure 5 which includes the control of the header data information generated from compressed data in the form of video sequence, GOP, picture, slice, macro block, and block layers, for example, and further to control the decoding of the pictures within the decoder of Figure 5. The control information as generated by circuit 201 of Kato et al therefore is representative of the control signal as claimed which is based on the compressively coded signal (i.e., the header data information).

Regarding the applicants' arguments concerning the section 103 rejection of the claims in view of the combination of Kato, Liu and Maruoka at pages 12-13 of the amendment filed May 22, 2006, the Examiner wants to point out that such arguments are deemed moot in view of the above new grounds of rejections.

Regarding the applicants' arguments at page 13 of the amendment filed May 22, 2006 concerning in general that "... in the Final Office Action the Examiner makes certain references to technologies alleged to be "well known". It is believed that such rejections are based on Official Notice ... It would not be appropriate for the Examiner to take Official Notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well known ...", the Examiner wants to point

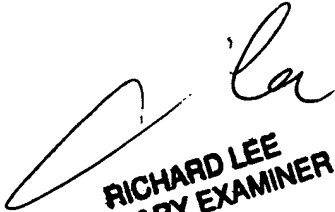
Art Unit: 2621

out that the rejection of the claims in the previous Final Office Action and as currently presented are not based on Official Notice. The references made by the Examiner of "well known" technologies are in fact based on the teachings of the applied references.

Regarding the applicants' arguments at pages 13-14 of the amendment filed May 22, 2006 concerning the advantages and concepts of the present invention, the Examiner wants to point out that: The Specification is not the measure of invention. Therefore, limitations contained therein can not be read into the claims for the purpose of avoiding the prior art. In re Sporck, 55 CCPA 743, 386 F.2d 924, 155 USPQ 687 (1968).

Regarding the applicants' arguments at pages 14-16 of the amendment filed May 22, 2006 concerning the rejection of claims 33-42 and in general that there is no description or suggestion in Kato that when the base band signal is outputted after the decoding is performed, the control signal is multiplexed with the base band signal to be transmitted together as set forth in claims 34, 35, 38, 39, and 40, the Examiner wants to point out that such arguments have been addressed in the above new grounds of rejections.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Lee whose telephone number is (571) 272-7333. The Examiner can normally be reached on Monday to Friday from 8:00 a.m. to 5:30 p.m, with alternate Fridays off.



RICHARD LEE
PRIMARY EXAMINER

Richard Lee/rl

8/2/06

